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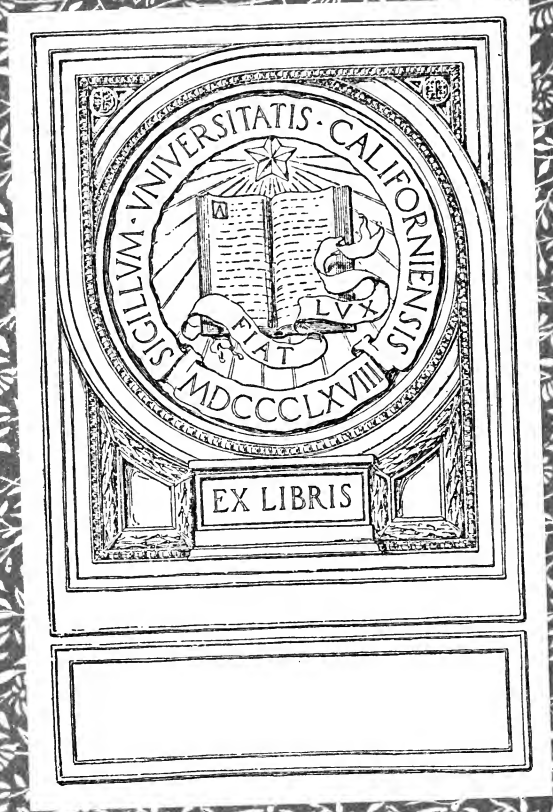
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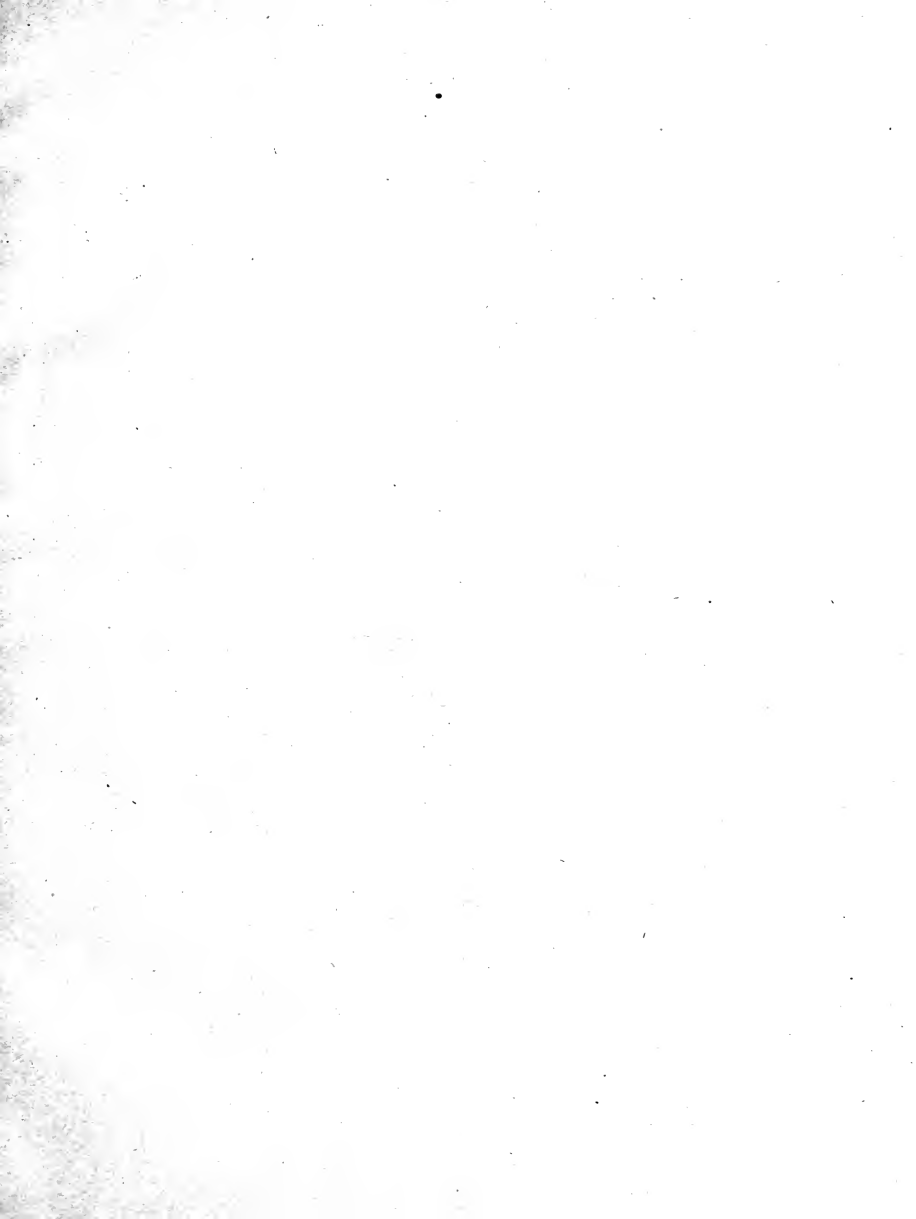
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THE
FAULTS OF SPEECH

A Self-Corrector

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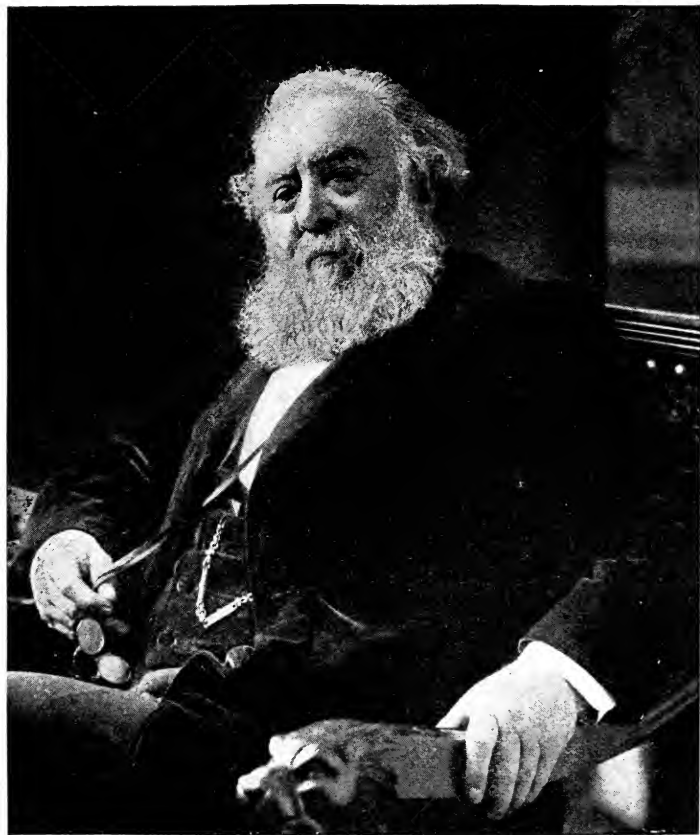
TEACHERS' MANUAL

BY

ALEXANDER MELVILLE BELL

SIXTH EDITION

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PREFACE.

THIS little work supplies a want of which I have been frequently reminded during my professional career. In revising the “Principles of Speech and Vocal Physiology” for a new edition in 1863, a section of the book was devoted to the “Cure of Stammering;” and in another section—the “Dictionary of Sounds”—reference was made under each consonant to the defects to which the element was subject: but a complete separate treatise on the **FAULTS OF SPEECH** has not hitherto been published.

I am glad to be able still, to add to my professional publications one which, I hope and believe, will prove not the least useful of the whole.

A. M. B.

TUTELO HEIGHTS,
BRANTFORD, ONT., April, 1880.



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THE FAULTS OF SPEECH.

ELEMENTARY SOUNDS.

THE processes of speech are mechanical, but they are intimately associated with mental operations. Sometimes the mechanical processes are mismanaged, and sometimes the intellectual associations are imperfect. In the latter case, expression is tardy or inexact; in the former, utterance is interrupted or vitiated. The two kinds of defect may be combined, or either may exist separately. Stammering, stuttering, etc. are, for the most part, mechanical defects; drawling, hemming, and—uh—uh—hesitation are, in great measure, faults of the intellect. The observations in this work will have reference to failures in the mechanical execution of speech.

The fact that "everybody speaks," and yet not one person in a thousand knows how he speaks; and that children talk the language of their nurses—be it English, French, German, Italian, Indian, Patois, or whatever else—proves that language is normally acquired by imitation. A child imitates with more or less accuracy the general effect of the sounds it hears; but, in doing so, makes many substitutions of easier for more difficult actions of the organs of speech. The lips and the forepart of the tongue are the first of the articulating organs to be brought into use; and "tum," "tat" and "tate" in most cases satisfy the child's apprehension of the words "come," "cat" and "cake." The action of the back of the tongue is often not acquired for years. Infantile defects are unwisely encouraged by parents, who—with the requisite knowledge—might enable their children to pronounce correctly as soon as they begin to prattle at all. There can be no doubt that the most serious blemishes and impediments arise from parental neglect—or rather ignorance—in this respect. When a child says "tum" for "come," and "tin" for "king,"

The correct articulation will be induced almost at the first trial by the simple expedient of holding down the forepart of the tongue with the finger. The effort to imitate the general effect will then force the back of the tongue into action; and in a few days at most, the child will, without any assistance, form *k*, *g* and *ng* where before it could only utter *t*, *d* and *n*.

The "shut" consonants (*p*, *t*, *k*, *b*, *d*, *g*) are the most easily acquired, and children consequently pronounce *p* instead of the more difficult *f*, and *t* instead of *th*. A few minutes devoted to amusing exercise will conquer this difficulty. Thus: tell the child to bite his lower lip, and blow, and he will form a tolerable *f* at once; or to bite his tongue, and blow, and a passable *th* will be the result. The sounds of *s* and *sh* are often for a long time confounded; also those of *s* and *th*. The sound of *s* will be obtained from *th* by drawing back—or, if assistance is needed, by pushing back—the tip of the tongue till it is free from the teeth. The teeth require to be very close for *s*, but there will be room to insert the edge of a paper-cutter to *play* the tongue

into position. The sound of *sh* will be obtained from *s* by drawing—or pushing—back the body of the tongue till it is free from the gum. The sibilant of *sh* is formed between the middle of the tongue and the palate, modified by a degree of elevation of the point of the tongue also: that of *s* is formed between the point of the tongue and the upper gum, modified by a degree of convexity of the middle of the tongue: and that of *th* is formed between the tip of the tongue and the upper teeth, with the edges of the tongue flattened against the side teeth to obstruct the breath at all points but the tip.

The sounds of *l* and *r* are generally the last to be mastered by a child. The *l* resembles *th* in having the point of the tongue in contact (preferably with the gum), but the sides of the tongue, instead of being flattened against the teeth, are free from lateral contact, so that the breath passes over the sides. *R* resembles *s* in having the point of the tongue raised to the upper gum, but the middle of the tongue, instead of being convex, is depressed so that the breath strikes sharply on the free tip of the tongue. The sound of

y resembles *sh* in having the middle of the tongue arched towards the palate, but without the elevation of the forepart of the tongue, which is a necessary part of the modification of *sh*.

Corrective Training.

A VERY little attention on the part of parents would secure their children against articulative blemishes which otherwise disfigure them for life; and which are often the first causes of the most painful impediments. Instead of being satisfied with the child's imperfect imitation of the general effect of concrete utterances in words and sentences, parents should require an exact reproduction—however slowly—of syllables, and, if necessary, of elementary sounds. This of course implies that parents can themselves analyze their utterance into syllables and elements. Few persons can do so with entire accuracy: but the attempt, though imperfect, will put the child in the right way to correct himself.

Some children manifest a degree of inaptitude for speech, probably from defective imitation, or it may be from intellectual dulness:

so that a child of three or four years of age will be no farther advanced than an average child of two or three. The faculty of imitation becomes almost inoperative after the earliest years, and special care should be given in such cases to establish a habit of distinct elementary and syllabic utterance so far as ability extends, and to prevent the formation of a habit of defect. It is certainly true that a child who fails to pronounce the whole of a word can be made to reproduce its syllables, or its elements, one by one; and as the longest utterance is made up of syllables, these only should be required of the learner. Facility of combination will infallibly come with practice, if patience and skill are displayed to regulate the analytic utterance of the backward child.

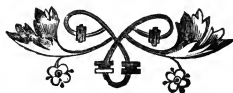
There is then no justification for allowing lispings, burrings, lallations and other elementary defects to become fixed into habits. True, they be corrected at any time, with but little trouble; yet "prevention is better than cure," and such elementary disfigurements of adult speech ought to have been rendered impossible by attention in the nursery and school-room.

Organic Defects.

ORGANIC causes of difficulty sometimes present themselves. When the formation of the jaws is such that the teeth cannot be brought evenly in line, the sibilant sounds *s* and *z* will be defective; when the tongue is too closely tied to the lower jaw, the sounds of *t*, *d*, *n*, *l* and *r* will be wanting in clearness. The dentist may do much to rectify the former malformation; and the surgeon, by the simple operation of snipping the frænum that binds the tongue, may give the requisite freedom in the latter case.

A more serious organic cause of defective speech is cleft palate, when an opening exists between the mouth and the nasal passage. The breath, which requires to be shut within the mouth for *p-b*, *t-d*, *k-g*, escapes by the nose, and a percussive articulation is impossible. In most cases a skilful dentist can cover the fissure in the palate by a suction-plate, and the power of clear enunciation may thus be obtained. Cleft palate causes all vowels to be nasalized; but frequently the fault of nasalizing vowels is merely habitual, without

any organic cause. As with the mechanism of consonants, so with that of vowels: habits of mal-pronunciation may be prevented more easily than rectified; and among other imperfections, that of nasalizing is perfectly susceptible of preventive or corrective training.





IMPEDIMENTS OF SPEECH.

FAR more serious than any of the elementary defects hitherto noticed are those affections of speech which create an impediment to utterance. These are known by the names of stuttering, stammering, spasmodic hesitation, etc. Their common characteristic is involuntary action of the organs, which are not obedient to the will. In stuttering, the articulating organs—the lips and tongue—rebound again and again before the sequent vowel can find egress. The mouth opens and shuts in vain effort to act on the throat; and the throat opens and shuts in vain effort to act on the diaphragm. From the rocking head to the fluttering chest there is a general want of precision in the attempt to articulate. In stammering, the breathing is entirely deranged—the normal actions of the chest and diaphragm are reversed—the breath

is inspired in the attempt to speak ; the throat is shut in the attempt to form sound ; the voice is fitfully ejected or restrained ; and the articulating organs when they meet remain inseparable, as if glued together. In spasmodic hesitation there is a futile straining, often silent and choking, but occasionally frightfully demonstrative. The eyeballs protrude, the veins of the neck start out, the face is suffused and contorted, and the muscles of the whole body are spasmodically affected.

No sharp line of demarcation can be drawn between these varieties of impediment. Loose stuttering is apt to pass into compressive stammering from the dread of ridicule inspired by consciousness of peculiarity ; and the worst features of spasmodic difficulty may supervene, from the increase of sensitiveness and the bitterness of disappointed effort.

Nervousness.

NOTWITHSTANDING the manifest nervousness of the majority of stammerers, they are rarely persons of weak nerves under ordinary circumstances. Their nervousness is associated only with speaking, and it is much more likely

to have arisen as a consequence of impediment, than to have been—as many imagine—a cause of the malady. The true cause probably lies far back in childhood, when some slight imperfection has been harshly corrected or mocked; or when weakness of the system after illness has made the child peculiarly sensitive under ordinary difficulties. The slightest beginning at that period may lead on to the most aggravated form of impediment. Even a casual example may excite imitation at the time when that faculty is the strongest in our nature, and so enslave the little mimic. Many isolated cases are believed to have had no other than this simple origin.

Stammering a Habit.

THE frequent occurrence of stammering among members of the same family has led many persons to imagine that the affection was transmitted hereditarily, and that consequently it was an incurable affliction of the constitution. But there is no ground for such a supposition, opposed as it is to the manifest nature of the impediment—pertaining only to speech, which is altogether artificial and no

part of our physical endowment. A full consideration of the subject and a wide experience with all varieties of the impediment lead to the settled conviction that stammering is a habit only—the formation of which may be entirely prevented by precautionary training in childhood; the growth of which may be easily checked before it is aggravated by the excitements of school; and the uprooting of which may be accomplished at any stage by intelligent care and perseverance.

Systems of Cure.

THE stammerer's difficulty is: where to turn for effective assistance. Certainly not to any pretender who veils his method in convenient secrecy, nor to any who profess to "charm" away the impediment—or to effect a cure in a single lesson! Not to any whose "system" involves drawling, singing, sniffing, whistling, stamping, beating time—all of which expedients have constituted the "curative" means of various charlatans; nor to any who bridle the mouth with mechanical appliances—forks on the tongue, tubes between the lips, bands over the larynx, pebbles in the mouth, etc.,

etc. The habit of stammering can only be counteracted by the cultivation of a habit of correct speaking founded on the application of natural principles. Respecting these there is no mystery except what arises from the little attention that has been paid to the science of speech.

Instruction must be sought from teachers whose professional position is a guarantee against deception. If no encouragement were given by too credulous stammerers to the craft of unqualified "professors," respectable teachers would prepare themselves by special study for this important department of work, and the stammerer's perplexity to find trustworthy skill would be at an end.

Self-effort Necessary.

BUT with the best assistance the stammerer must work out his own cure. He cannot be passive in the matter. He must clearly apprehend the principles on which he is to proceed, and diligently apply them. Nor must he, in this, depend too much on the watchfulness of his instructor, but must learn to watch over himself. His perfect release from the

habit will require time, patience, and hopeful energetic effort.

Temporary Relief.

IMMEDIATE temporary relief from the choking and spasmodic contortions of the impediment is generally obtained when the art of managing the breath is acquired—and this is often in a single lesson. The stammerer is apt to be unduly elated at this stage, and to relax his watchfulness. A relapse is almost certain to be the consequence. Besides, other functional difficulties will present themselves, each of which must be encountered in a courageous spirit, and mastered separately.

The following practical directions are designed for the use of stammerers who may attempt their own cure, as well as for the guidance of parents, governesses and school teachers.



PRACTICAL DIRECTIONS
FOR THE
CURE OF STAMMERING
AND
MINOR DEFECTS.



THE CURE OF STAMMERING.

The Breath.—Atmospheric Pressure.

IN normal breathing the lungs are filled by atmospheric pressure, to the extent of the cavity within the chest. There is no suction—no effort. In deep breathing, as before a sigh, the inspiration is equally easy and unlabored. The cavity within the chest is increased by descent of the diaphragm—the muscular base of the chest—as well as by expansion of the bony framework—the ribs, etc.—but atmospheric pressure fills out the lungs to occupy the entire space created within the chest.

Air Channels.

THE external apertures for the entrance of the air are the mouth and nostrils. Both these passages meet behind the mouth, in the pharynx; and the pharynx communicates with the

windpipe. At the top of the windpipe, between it and the pharynx, is the organ of *Voice*—the larynx—through which all air entering the lungs, and all breath leaving them, must pass. In order to make inspiration silent and effortless there must be no obstruction or constriction in any part of the passage. Stammerers attempt to “draw” in air while the aperture of the larynx is either closed or greatly narrowed, and even while the mouth-passage is similarly obstructed by positions of the tongue. The first point to be impressed on the stammerer’s mind, then, is that the lungs *fill themselves*—that no effort of suction is required; but that if he merely raise the chest, with the passage to the windpipe open, he cannot prevent the lungs from filling.

Inspiration and Expiration.

NEXT, considering that air entering the lungs and breath escaping from them must pass through the same channel, it is obvious that the acts of inspiration and expiration must be alternate, and cannot possibly take place simultaneously. Stammerers, however, endeavour to draw in air at the same time that

they are making muscular efforts to expel the breath. The first condition of free respiration is, then, a *silent pause* to replenish the lungs ✓

Again, in stammering, the chest is violently heaved and pressed down, and the action of the diaphragm is downwards instead of upwards. The action of the diaphragm may be distinctly seen in the motion of the abdomen. When the diaphragm falls (in inspiration) the abdomen slightly protrudes; and when the diaphragm rises (in expiration) the abdomen falls inward. The chest should rise and fall but little; it should be kept moderately raised throughout speech, and the principal action of respiration should be in the diaphragm. The requisite motion, however, is very slight, and entirely free from jerking. The stammerer must practise the acts of *inspiration* and *expiration* until they are practically, as well as theoretically, faultless. ✕

The Voice.

VOICE is formed by the breath in its outward passage setting in vibration the edges of the aperture of the larynx—the glottis. ✓
Stammerers often endeavour to form voice with

ingoing air; but in general they *close* the glottis in the effort to vocalize. This of course stops the breath, and hence the choking and other distressing symptoms of the impediment.

Voice is the *material* of Speech. This fact, in all its meaning, the stammerer has to learn. His efforts are always directed elsewhere than to the organ of voice. He moves the head, he moves the jaw, he moves the tongue, he moves his limbs, in the vain attempt to force out sound, the production of which he is all the time preventing, by closing the passage through which only voice can come. Voice being the material of speech, the speaker must have voice, whatever else he lacks. The stammerer must not stint himself of this material, nor must he cut it into shreds and fragments; but he must acquire command of a full, strong, unbroken stream of sound.

Exercise — Continuity of Voice.

HAVING mastered the art of regulating the breath, the stammerer's next step must be to practise the continuous production of voice. He should confine himself to this exercise until he has become perfectly familiar with all

vocal elements ; repeating them first one by one, then in long sequences, and then in combinations, but always without a break in the continuity of the sound.

The following are the elements for this exercise, all of which may be prolonged *ad libitum* :

a, e, i, o, u, ah, aw, oo, oi, ou ;

l, m, n, ng, v, dh, z, zh, w, y.

These elements are not to be considered as "vowels" and "consonants," but simply as *voices*, each of which has *precisely the same sound* in the throat ; their differences arising solely from the shape of the mouth-passage.

It must be carefully noted that the *names* of the letters will be useless for this exercise ; the actual sounds of the elements must be pronounced.

How to Learn Elementary Sounds.

THE reader unaccustomed to phonetic analysis will have no difficulty in isolating the actual elementary sounds, if he will simply *prolong for some seconds* the elements printed in

capitals in the following words, as commonly pronounced :

feeL, seeM, vaiN, soNG, leaVe, wiTH (dh),
iS (z), rouGe (zh) ; We, Yes, Ale, An, EEL,
End, Isle (ahee), In, Old, On, Use (yoo),
Us, Arm (ah), All (aw), OOze, OWl (ahoo),
Oil (awee).

The use to be made of the power which will be developed by this exercise is all-important. The sensation of throat-action must never be lost in speaking. When old tendencies incline to false effort, the stammerer will feel himself *off the voice*, like a locomotive off the rails. Then, instead of plunging about wildly at random, he must stop, and carefully put himself upon the track again.

There are three elements of speech which have *obstructed* vocality, and cannot be prolonged. These are B, D, and G (as in *go*) They are often terrible stumbling-blocks to the stammerer : but his never to be forgotten talisman is : VOICE ! No mouth-action must be allowed to interfere with throat-sound !

There is another class of elements which are entirely *non-vocal*, and which therefore tend strongly to throw the stammerer "off the

voice." These are P, T, K, F, Wh, Th, S, Sh, H. Each of these should be practised separately, in connection with a vowel; and with the principle constantly before the mind that *no mouth-action must be allowed to interfere with the flow of throat-sound.*

Difficult Elements.

ELEMENTS that present special difficulty must be made the subject of special exercise, thus: Prolong any throat-sound, say the vowel *ah*, and without stopping the sound introduce the mouth-action to be practised, say B, thus:

ah—bah—bah—bah—bah, etc.

It will be found that the mouth-action does not interfere with the continuity of the throat-sound. The exercise must be continued until the true relation between the two kinds of elements is distinctly *felt* and established in the mind.

The relation between the throat and the mouth in speech will be understood when it is stated to be the same as that between the sound-producing part of the *flute*—the mouth-hole—and the sound-modifying parts—the

finger-holes. The action of the fingers modifies, without interrupting, the sound produced at the mouth-hole; and so the mouth-actions in speech modify, without interrupting, the sound produced in the throat. This relation must be established practically, in connection with the elements of speech, in cases of stammering, and all difficulty, and dread of difficulty, will certainly sooner or later disappear.

A few other directions will complete all that is necessary to be attended to in overcoming the habit of stammering.

The Mouth a Tube.

FROM what has been already said, it will be understood that all effort thrown into the mouth, jaw, lips or tongue, is futile. The mouth should be as nearly as possible *passive*, a mere tube or funnel for the delivery of throat-sound. The mouth-tube is constantly varying in shape; but it is always a transmitter only, and never an originator of sound.

The Jaw.

A GREAT deal of the stammerer's difficulty will consist in subduing the upward pressure

of the jaw. Whatever action the jaw has should be downward; but there must be no pressure, even in the right direction. The practice of throwing the effort of speech back to the throat will, however, speedily relieve the tendency of the mouth-organs to cling together.

When mechanical assistance may be necessary, a paper-cutter held against the edges of the upper teeth will manifest any undue upward motion of the jaw, while it will not prevent the mouth from opening. The paper-cutter must not be held between, or by, the teeth. When the maxillary difficulty has been overcome, the lower teeth should not once touch the paper-cutter, in reading or speaking. A gentle contact will be almost unavoidable in forming the hissing sounds, but even this should be prevented in curative exercise.

The Head.

A LOOSE rising motion of the head is almost a universal feature in stammering. This must be subdued before power can be obtained over the organs of speech. The head should be held firmly on the neck, so that even a con-

siderable pressure would not force it back. At the same time there should be no stiffness to interfere with free motion. The fault consists in lifting the head, as a part of the action of speech; and it is often a source of very great difficulty. The jaw cannot be controlled while its fulcrum, the head, is unstable and yielding.

Spasmodic Actions.

WITH reference to the spasmodic actions of stammering, which sometimes extend over the whole body, no specific directions are needed. They invariably disappear when the breathing is relieved.

There is nothing to prevent a stammerer who will thoroughly master the principles laid down in this Treatise and diligently and watchfully exercise his voice, from perfectly throwing off the fetters of impediment. Many exercises will be found in the Author's "Principles of Speech," which will be of service. But, while a study of the whole subject, and a knowledge of all the organic actions, as exhibited in "Visible Speech," are desirable, if not necessary, for *teachers*, stammerers should

not allow the mind to be diverted from the direct and simple means of cure sufficiently set forth in these pages.

Self-Observation.

ONE important hint remains to be given. With all persons speech-actions are so purely habitual that without watchful observation faults may long remain undiscovered. This is especially true in reference to the minutiae of the organic actions on the rectification of which success depends in cases of defect or impediment. The stammerer will therefore find the use of a *mirror* a most valuable auxiliary in his efforts at self-correction. In carrying out the prescribed principles for the regulation of the breath, the control of the head and the jaw, the proper mechanism of elementary sounds, etc., let the stammerer seat himself before a mirror, and he will learn many things of which he might otherwise have continued unconscious. Even teachers, in dealing with defects and impediments of speech, should place their pupils before a mirror, as the readiest means of giving them command over the organs of articulation. To

this use of the principle of "reflection" as an aid to self-government, the poet's denunciation of

"Attitude and stare, and start theatric
Practised at the glass,"

has no applicability. The vocal action of singers, as well as speakers, would less frequently offend the eye if students were taught to exercise the voice before a glass, that they might "see themselves as others see them."

Capricious Difficulties.

It is a very curious circumstance that stammerers who are powerless in the presence of friends or strangers, generally declare that they can speak freely when alone. A child, however, or even a cat, in the room is enough to destroy their freedom. The proper use to make of this fact should be to build on it as a ground of hopefulness and confidence; for it proves that no organic cause exists to prevent success, and thus disposes of the mysterious dread of physical entailment. But stammerers are often the victims of many equally groundless fancies:—supposing their infirmity to be affected by certain states of the

atmosphere, the direction of the wind, or the phases of the moon! Those who look for such associations are pretty sure to find them. But they carry the seekers back to the days of witchcraft and the "evil eye"—to days of ignorance!

Aggravants of Difficulty.

THE function of articulation—like every other function—is, of course, affected by the condition of the health—deranged digestion, depression of spirits, physical debility, etc.; but these aggravants are not to be confounded with original causes of the difficulty. The former will disappear and still leave the latter behind. The stammerer must cast off idle superstitious fears and fancies, and *set to work* to study and observe. He will undoubtedly find that "Knowledge is power;" and that, with knowledge, "Patience and perseverance will conquer all difficulties."





MINOR FAULTS.

Nasalizing.

THE soft palate which hangs at the back of the mouth acts as a valve on the passage to the nose. When the top of the soft palate is arched backwards from its point of junction with the hard palate, it covers the internal nasal aperture, and the breath passes altogether through the mouth. When the soft palate is relaxed and pendent from the edge of the hard palate, the breath passes partly through the nose and partly through the mouth; and when the mouth-passage is closed (by means of the back of the tongue, as in *ng*; the forepart of the tongue, as in *n*; or the lips, as in *m*) the breath passes altogether by the nose. A knowledge of these facts will enable any person to correct the habit of nasalizing vowels.

The chief difficulty lies in the recognition

by the *ear* of pure oral and mixed nasal quality. The action of the soft palate may, however, be *seen*, by opening the mouth very wide in pronouncing the vowels *ah* and *aw*. Then, by pressing on the top of the soft palate with the thumb, or with the india-rubber end of a pencil, the internal nasal aperture will be covered, and the utterance of *ah* and *aw* will be purely oral. Repeat these vowels with and without the mechanical pressure, and after a few experiments the ear will distinguish the difference between oral and nasal. Practice on other vowels, in forming which the soft palate cannot be seen, will soon develop a *feeling* of the difference.

But the readiest way to gain a perception of the denasalizing action of the soft palate will be by the following exercise :

Sound the consonants *m* *b* without separating the lips, as in pronouncing the word *ember*.

The change from *m* to *b* is nothing more than the covering of the nasal aperture by the soft palate ; and the change from *b* to *m*, without separating the lips, as in the word *submit*, is merely the uncovering of the nasal aperture.

The tendency to nasalize vowels is most felt when they occur immediately before or after nasal consonants—*m*, *n* or *ng*—but many persons nasalize every vowel.

The French elements *an*, *en*, *in*, *on*, *un*, *am*, *em*, etc., are merely nasalized vowels.

The Aspirate.

THE letter H represents a simple and nearly silent emission of breath. The organs of speech are placed in the position for the subsequent vowel before the emission of the aspirate. Thus *h* in the words *he*, *hay*, *hie*, *hoe*, *hah*, etc., has the oral quality of the vowel it precedes. The aspirate is not the same as a whispered vowel, for the words *his* and *is*, *hand* and *and*, *hold* and *old*, *hart* and *art* are clearly distinguishable when whispered.

H is sometimes roughened faultily by a guttural quality. To correct this habit, breathe out the aspirate silently.

The *Cockney* confusion of vowels and aspirates is a remarkable fault which will disappear when learners are taught phonetically in the abecedarian stage of education. The same person who says *all* for *hall* pronounces *hall*

for *all*, and so proves that the perverse habit is due only to defective elementary training.

H is omitted in pronouncing the words *heir*, *honest*, *honour*, *hour*, *humour*, and their derivatives. It should be pronounced in *herb*, *hospital*, *humble*, and all other words.

H is heard instead of *wh*, before *o*, as in *who*, *whose*, *whom*, *whole*.

Vocal Consonants.

THE following consonants are respectively pairs of *vocal* and *non-vocal* elements; that is, the consonants in the second column have precisely the same oral formation as those in the first column, but with the addition of throat-sound or murmur.

<i>non-vocal.</i>	<i>vocal.</i>
P	B
T	D
K	G as in <i>go</i> .
F	V
WH	W
S	Z
SH	ZH as in <i>vision</i> .
TH as in <i>thin</i>	TH (= <i>dh</i>) as in <i>then</i> .
CH as in <i>church</i>	J
X (= <i>ks</i>) as in <i>extend</i>	X (= <i>gz</i>) as in <i>exist</i> .

These pairs of consonants are confused by Gaelic and Welsh speakers, who substitute non-vocal for vocal elements; and by German speakers, who mix up the elements sometimes by a similar substitution, but more frequently by the use of vocal instead of non-vocal elements. Careful exercise and observation will entirely remove these difficulties.

Thickness of Speech.

THE consonants *t*, *d*, *n*, *l*, *r*, are correctly formed by the point of the tongue acting against the upper gum; but in "thick" speech the tongue acts against the teeth, or the point rests on the lower teeth and the above elements are imperfectly formed by the surface of the tongue. This fault is unavoidable when the tongue is so tied to the bed of the jaw that the point cannot be raised. But "thickness" has not always this excuse; it is often the result of a childish habit of sucking the tongue, that should have been "put away" with the years of childhood. The more sharply the tongue can be pointed upwards, the better will *t*, *d*, *n*, *l*, and *r* be formed. The tongue should never touch the lower teeth in speech, and it

should never come between the teeth except for the single element *th—dh*, and then to a very slight extent. In fact, *th* is best formed with the tongue *behind*, instead of between, the teeth.

ORATORICAL FAULTS.

Conversational Slurring.

WHEN a person unaccustomed to public speaking has occasion to address an audience, his words seem to run together, and it is only with the greatest difficulty that their purport can be gathered by a hearer at a little distance. He is called on to “speak out” and “speak up,” but increase of force is of little avail. He has to learn the difference between speaking and mumbling.

Conversational speech is, in general, very slovenly. Could it be written down exactly as we hear it, the speaker would not recognize the unintelligible jargon. Thus:

Convsashnlspeech zngenlveslovnly.

This is not an exaggeration of the kind of utterance that passes current in social life. The chief element of distant audibility—

throat-sound, or voice—is so curtailed and slurred out, that little more than mouth-actions remain.

Sustained Voice.

THE very reverse must be the relation of throat to mouth in oratorical speech. Consonants may be softened to any degree, but vowels must be given fully and with swelling clearness. Thus :

CONVERSATIONAL SPEECH IS IN GENERAL VERY SLOWLY.

But it is possible to soften the consonants too much ; to soften them away altogether, as we hear from some yaw-yaw-yaw speakers whose utterance is

Vox et preterea nihil.

In good delivery every element should be heard in its proper relation to other elements ; every syllable in its proper relation to other syllables ; every word in its proper relation to other words ; every sentence in its proper relation to other sentences.

Sustained vocality is the secret of good oratorical speech. This quality has perhaps

never been better illustrated than in the case of the Rev. Mr. Spurgeon, who, with no apparent effort, in the vast Agricultural Hall, at Islington, London, made himself distinctly heard by an assemblage of twenty-five thousand persons.* There could, of course, be no undue softening of the consonants in such delivery, nor, on the other hand, was any harshness or prominence of consonant-action perceptible even to the nearest auditor.

Some coarseness of effect to ears in the immediate vicinity of a speaker is almost unavoidable in order to secure effectiveness at a distance. Oratory is in this respect analogous to scene-painting: the canvas which charms by the softness of its depictions when viewed from the proper standpoint, is often incredibly rough to a close inspector. The speaker, then,

* I was present on one of the occasions. I got as near to the speaker as possible, with the view of studying his management of the vocal bellows; but I could discover no unusual labour or straining. All was easy and natural. I was within five feet of the speaker; and a friend with whom I was to compare notes took the most distant seat from the platform. We counted the audience by means of the uniform sections into which the seats were arranged, and found the number of hearers was upwards of 25,000. The nearest ear was not offended by bellowing: the most distant lost no syllable.

may without offence lay on his vowel lights and shades in masses, and give corresponding strength and firmness to his consonant outlines, in order to produce the right effect in the farther corners and galleries of his auditorium.

It is to be noted that the percussiveness of good oratorical speech is not due to chest-action—which would be laborious—but to expansibility of the pharynx, the cavity at the back of the mouth and above the throat. Distension of the pharynx may be plainly seen in the neck of a player on the bugle or cornet-a-piston.

Mal-Respiration.

THE exhaustion after vocal effort from which many public speakers, especially clergymen, suffer; the “clerical sore-throat,” which by its frequency has won for itself a place in medical terminology; and the wild outbursts of vociferation which throw the whole physical frame into violent action, are due to mismanagement of the “vocal bellows.”

The principles of easy, natural, powerful respiration are fully explained in the earlier

sections of this work. Let public speakers develop the solidity of chest and mobility of diaphragm prescribed for the enfranchisement of stammerers from their spasms of difficulty, and the oratorical defects associated with mal-respiration — and which are so often painful in their consequences — will be unknown.

Oratorical defects in the *expressive* management of the voice, by inflection and modulation, are extremely common. In reference to these the reader is referred to the Author's "Principles of Elocution."*

* Fourth edition, 1878. Salem, Mass., J. P. Burbank.





ORGANIC SUBSTITUTIONS.

A GREAT variety of the minor defects of speech arise from the substitution of one part for another of the oral organs. The correction of such defects presents no difficulty to one who is familiar with the true formation of the elements of speech. The following classification embraces all ordinary defects of this kind. The directions given should render self-correction a hopeful undertaking in any case, however long-established may be the habit.

One plan of exercise should regulate teacher or self-corrector in all cases. The attempt to introduce a new element at once in reading or speaking will never succeed. Awkwardness and habit will defeat the best efforts of unaccustomed organs. Elementary power must first be gained. Thus :

- I. Pronounce the element *separately* again and again, until it becomes easy of formation.
- II. Practise its combination with a *single vowel*, and continue this form of exercise until rapid reiteration becomes easy.
- III. Practise separately all the *consonant combinations* into which the element enters.
- IV. Pronounce *words* or *sentences* containing the element—repeating each quickly.
- V. Introduce the corrected element in reading, by slightly holding or *prolonging* it at each recurrence, until the habit is formed of articulating it correctly without special effort.

One hour of systematic exercise regulated as above, will do more than a week of desultory effort.

I.—D for G.

THIS is generally an infantile defect, and easily corrected (see page 3) ; but if no efforts are made for its removal at an early age, it will continue to disfigure even adult speech. When we hear a grown-up boy or girl saying “dood” for good, and “dive” for give, the very natural assumption is that there must be

a congenital cause for the defect. But this is a mistake. The action of the back of the tongue only requires to be developed. Hold down the forepart of the tongue, and the back will be compelled into action. Give this mechanical assistance in pronouncing the words

gay, guy, go, gawk, gag.

An hour's exercise should cure this defect.

It is a curious fact that perhaps three-fourths of all speakers unconsciously substitute *d* for *g* in the initial combination *gl*, as in *glad*, *glide*, etc. Indeed, the resemblance in sound is so close that only a watchful ear will discover the difference. Try :

dlad, dlide, dlow, dlove, dlory, dloom.
glad, glide, glow, glove, glory, gloom.

II. *Th* for *R*.

THE formation of *r* as that letter is pronounced before a vowel, requires the tip of the tongue to be pointed towards the upper gum. In this defective substitution the tongue lies flat, and acts forward against the *teeth*, giving the sound of a soft *dh* (= *th* as in *then*), instead of *r*. Thus :

“*A pdhetty intedhesting bdhide.*”

A pretty interesting bride.

Inability to raise the tongue is generally the cause of this defect. To effect a perfect cure the tongue may require to be loosened; but careful exercise will, in most cases, develop sufficient power to make a good—though untrilled—*r* without an operation.

III.—*F* for *S*.

THIS is one of the many forms of defect arising from inactivity of the forepart of the tongue. Sometimes a slight *s*-ward motion is made by the tongue at the same time that the lip's movement gives sharpness to the sibilation. To correct this defect, hold down the lower lip, and see the teeth, while pronouncing *s*.

IV.—*F* for *Th*.

THIS defective substitution arises from the same cause as the preceding—sluggishness of the tongue. To correct it, hold down the lower lip and see the teeth while pronouncing *th*.

F and *th* are so much alike in phonetic effect

that this substitution might almost pass unnoticed by one who did not see the speaker's mouth. The resemblance will be manifest in the following experiment :

free, firty, firty-free, featre, fimble.
 three, thirty, thirty-three, theatre, thimble.

V.—*Gh for R.*

THIS is the defect commonly called "Burring," in which the back of the tongue is brought into action instead of the point. The sound has all the varieties of the front-lingual vibration—smooth, when the soft palate is merely approximated to the back of the tongue; and rough, when the uvula is rattled against the tongue.

This defect sometimes arises from tonguetiedness, but is very often a mere habit acquired by imitation. The cure is by no means difficult. To bring the point of the tongue into action, prolong the vowel *aw* and lift the tip of the tongue till it almost touches the edge of the palatal arch. Repeat the action a number of times without stopping the vowel sound. In this way the characteristic vibration of *r* will be gradually developed.

The tongue in this exercise may be raised so close to the palate as to produce the effect of *d*—but softly, and without pressure, thus ;

aw—daw—daw—daw—daw, etc.

Gradually endeavour to maintain the tongue in this close approximation to the palate all the time that a continual vocal buzz is heard. This is a rudimental *r*. Practice on this new element, according to the directions on page 41, will complete the cure.

When the tongue is too much tied to the bed of the jaw, the true vibration cannot be perfectly acquired without an operation ; but the “burring” may at least be discontinued, and an approximately distinct *r* substituted.

VI.—*L for R.*

THIS substitution is common among children, the articulation of *l* being easier than that of *r*. The Chinese never pronounce *r*, but substitute *l*. The two sounds are produced by the action of the same part of the tongue—the point ; at the same part of the palate—the upper gum : the difference being that the voice passes over the tip of the tongue for *r*

and over the sides for *l*. The alternation of these letters in words and sentences presents a difficulty to most persons; as in "Truly rural." "Rob ran along the lane in the rain." "A lump of raw, red liver," etc.*

VII.—*Lh for S or Sh.*

THE sibilants *s* and *sh* are produced by the breath passing along a central channel over the tongue arched towards the palate, and with more or less elevation of the point. This defect consists in passing the breath over one or both *sides* of the tongue, as in forming *l* without voice. The *l* apertures are narrowed so as to cause a hissing, not unlike that of the true sibilants. To correct this fault, the first point is to concentrate the breath in a single central channel. The channel of *r* may be used as a guide; and the channel of *y* will also be available. Substitute *r* without voice for the defective "cluttering" *s*; and *y* without voice for the defective *sh*. By arching the middle of the tongue while the point is in the position for *r*, *s* will be produced; and by

* Many exercises on these and other difficult combinations will be found in the Author's "Principles of Speech and Dictionary of Sounds."

raising the front of the tongue while the middle is in the position for *y*, *sh* will be produced. The sounds obtained may at first be very imperfect, but they will work into form. Perhaps—as often happens—some experimental or accidental shift may strike the true position and end all difficulty. The hisses must, however, be perfected as *elements* before any attempt is made to introduce them into words and sentences.

VIII.—*N* for *Ng*.

CHILDREN who pronounce *d* for *g* and *t* for *k*, of course sound *n* instead of *ng*. But the substitution is very common also among careless speakers in pronouncing the termination *ing*: as in *meetin*, *eatin*, and *drinkin*, for meeting, eating and drinking. This substitution is universal in Scotland. In the words *length* and *strength* the *ng* is very apt to be changed into *n* for ease of pronunciation. The sounds of *k*, *g* and *ng* are pronounced by the very same organic action—contact and separation of the back of the tongue and the soft palate: the differences being that *k* is non-vocal, *g* vocal, and *ng* naso-vocal.

IX.—*Ng for L.*

THIS substitution is a not uncommon accompaniment of burring, arising from the same inability—or habitual difficulty—in raising the point of the tongue. The effect of *ng* at the beginning of a syllable is very peculiar, as that element is never initial in English. Thus :

ngove, ngord, ngady, nget weng angone.

love, lord, lady, let well alone.

The formation of *l* has been explained above (see page 45). Some assistance in correcting this defect will be obtained, at first, by holding the nostrils, to prevent emission of sound by the nose.

X.—*Ng for N.*

THIS is an allowed assimilation, not a defect, when *n* occurs before *k* in the same syllable, as in

inky, rangk, mongk, trungk.

ink, rank, monk, trunk.

It would be difficult to articulate *n* in these words.

The same substitution of *ng* for *n* takes

place - but not uniformly—before *g*; as in

angger, fonger, longer, language.

anger, finger, longer, language.

Foreigners are unnecessarily puzzled by the anomaly between such words and hanger, singer, wronger, etc., where the *ng* represents a single consonant.

XI.—*Ngg for Ng.*

THIS is a Cockney peculiarity, occurring chiefly where *ng* is followed by a vowel, as in

singging, sing-g-a song.

singing, sing a song.

The correction of this defect will be assisted at first by a slight stop between the *ng* and the vowel.

XII. *Nh for S.*

THE effect represented by *nh* is *n* without voice—a simple breathing through the nose while the tongue is in the position for *n*. This defect is generally attributed to a congenital organic cause; but when it occurs as the single nasal peculiarity of a speaker, it may be confidently pronounced to be merely a correc-

tible habit. Assistance will be derived at first from a mechanical prevention of nasal emission—by pinching the nostrils; and also by blowing a feather off the hand held before the mouth.

When oral emission has thus been obtained the means already prescribed for acquiring the s sibilation (see page 46), will be effectual in curing the ungainly sniffing of this defect.

XIII. *S for Sh, and Sh for S.*

THESE two forms of defective sibilation will be corrected by the means pointed out in previous sections. The shades of difference in hissing sounds are numerous: many sibilations are heard of an intermediate kind, and which partake more or less of the characteristics of one or the other of the representative sibilants. Organic malformation sometimes prevents a perfect rectification—as irregularity of the teeth; inability to close the jaws; projecting or retreating jaw, etc.—but even in the worst of such cases, improvement will follow intelligent effort. In all cases where no malformation exists, the sibilants may be adjusted to a normal standard.

The teeth require to be very close in pronouncing *s* and *sh*. They should not touch, but their separation can not be greater than the thickness of a paper-cutter without producing some peculiarity.

The alternation of *s* and *sh*—like that of *r* and *l*—presents a difficulty to most persons, as in “Such a sash.” “A shot silk sash.” “A shabby sash,” etc.*

XIV.—*S for Th and Z for Dh.*

THIS substitution is made by French speakers, whose native language does not contain the sounds of *th* and *dh*. Imitation might be expected to teach the foreigner so obvious an articulation; yet those who have spoken English for years may still be heard saying “I sink” for I think, and “zat” for that. A few minutes’ exercise suffices to cure this defect.

XV.—*T for K.*

THE directions given on page 41 for the correction of the defect “*D for G*,” apply equally to the kindred elements *t* and *k*, which are

* See note, page 46.

merely the non-vocal forms of *d* and *g*. (See page 33.)

The unconscious use of *t* instead of *c* (= *k*) in the combination *cl* is also as common as that of *d* for *g*. Thus :

tlay, tlaw, tlew, tclaim, tlever, tlose.
clay, claw, clew, claim, clever, close.

XVI.—*Th* for *S*.

THIS is the defect commonly called "Lisp-
 ing." The relation between *th* and *s* is the
 same as that between *l* and *r*. The breath
 escapes by a central aperture for *s*—as for *r*;
 and by lateral apertures for *th*—as for *l*. In
 forming *r* and *l* the middle of the tongue is
 concave and the point sharply raised : in form-
 ing *s* and *th* the middle of the tongue is con-
 vex, and the point flattened out. The central
 channel for *s* is over the *top* of the point of
 the tongue ; that for *r* is over the *end* of the
 tip. The lateral apertures for *th* are between
 the edges of the point of the tongue and the
 teeth, or the upper gum ; those for *l* are be-
 tween the body of the tongue and the side, or
 back, teeth. The apertures for *th* are inter-

stitial, and so cause hissing of the breath; those for *l* are wide, and allow the voice to pass with vowel purity. The *l* channels may, however, be narrowed so as to produce sibilantion, and this is one form of defective substitution for *s*. (See page 46.)

Lisping is easily cured. But some persons affect the lisp as a symbol of childish artlessness, and, like Orlando of his love-disease, "would not be cured." A better means of displaying simplicity and innocence might be suggested; but

"de gustibus non est disputandum."

The correction of the habit of lisping will be facilitated at first by mechanically preventing the tongue from touching the front teeth. The edge of a paper-cutter may be used to push back the tip of the tongue.

The tongue should be altogether out of sight in forming *s*.

XVII.—*V for Dh.*

THE remarks on "*F* for *Th*" equally apply to these, the vocal forms of the same articulations. (See page 43.)

XVIII.—*V for Z.*

THE directions on page 43 apply equally to these elements, which are merely vocal forms of *f* and *s*.

XIX.—*V for W and W for V.*

THERE is a tendency to confound these consonants when they occur in alternation, as manifested in the Cockney's "werry vell" for very well.

French and German speakers, whose vernacular recognizes no sound exactly corresponding to the English *w*, pronounce *v* instead of it. The French, however, use the true sound of *w* in pronouncing their diagraph *oi*, as in *soir*, *boire*, *oiseaux*, etc.

The German *w* has the same labial action as the English element, but with a difference in the position of the tongue, which is advanced for the German and retracted for the English *w*.

Foreigners can be taught the knack of the English element perfectly. Imitation is obviously worthless for their direction. Mechanical assistance will overcome the difficulty. Thus: sound the vowel *oo* for some seconds

and during the continuance of the sound gently approximate the centre of the lips with the finger and thumb a number of times. The vowel *oo* will be changed into the word

woo, woo, woo, woo, woc,

and the consonant *w* in its most difficult combination will be the result.

English readers may, in the same way, perfectly acquire the knack of pronouncing the German *w*. Thus: sound the vowel *ee* for some seconds, and during the continuance of the sound gently approximate the centre of the lips with the finger and thumb a number of times. The vowel will be changed by every action into a true German pronunciation of the word

wie, wie, wie, wie, wie.

The phonetic resemblance of the German *w* to the English *v* will be recognized in this experiment. The articulative actions are, however, different, and the English student of German should profit by the lesson and distinguish in future between English *v* and German *w*.

XX.—*W for L.*

THIS substitution is due to lingual laziness. The tongue lolling on the bed of the jaw surrenders its proper functions to any part of the organs that can be got to undertake them. In this case the lips are obliging, and we hear :

“*Wet the wady wait a wittoo.*”

Let the lady wait a little.

The existence of such defects is a disgrace. No difficulty attends their correction, and they should never have quitted the nursery.

XXI.—*W for R.*

R is the most difficult of all the consonants for children to learn, and it is, of all elements of speech, the most variously pronounced in languages and dialects and among individual speakers. When the *r* is trilled—as in Scotland—the sound is nearly uniform, but the less definite varieties heard in England and America differ greatly. The American *r* scarcely uses the point of the tongue at all, but has a glide-sound approximating to that of *y*, while, between vowels, the *r* is modified by the lips, as in “*ve^ry*.”

In England the *r*—final or before a consonant—has the vocality of a vowel; and even the initial *r* has little of the fricativeness of a consonant.

The substitution of *w* for *r* is a favourite dandyism in English speech, and generally accompanies the *aw*—*aw*—*aw* of

“*Awistocwatic dwawl.*”

Aristocratic drawl.

Those who have acquired the habit of using *w* for *r*, otherwise than as an affectation, or of mixing the sounds of *w* and *r*, may easily cure themselves by the means recommended on page 43 for the delabialising of *s*, namely: Hold down the lower lip with the finger, and see the teeth while pronouncing *r*.

XXII.—*W* for *Wh*.

Wh is to *w* precisely what *f* is to *v*, or *s* to *z*—the non-vocal form of the same articulative action. Speakers who make no difference between these elements confound “*wh*ey” with *way*, “*wh*ich” with *witch*, “*wh*ale” with *wail*, “*wh*ether” with *weather*; and put their hearers to unnecessary trouble to unriddle their

ambiguities. Refinement consists in the preservation of nice distinctions ; and no speaker with any pretensions to refinement will willingly forego such a source of distinctiveness as the proper pronunciation of these and all elementary sounds.

Cockney speech has no *wh*.



POSTSCRIPT

TO

SECOND EDITION.



POSTSCRIPT TO SECOND EDITION.

A NEW Edition of this little book having been called for, the opportunity is presented for adding any further observations or directions that may seem necessary. The highly condensed matter in these pages could easily be expanded so as to fill a volume ; but the precision of the Treatise in its present form is one of its chief recommendations for the actual work of rectifying the “Faults of Speech.” Some little peculiarity in the action of a single organ, or in the mode of pronouncing a single elementary sound, has the effect of rendering the whole of speech peculiar ; and the work of correction is incredibly simple when the fault is merely traced to its mechanical cause. The list of such mechanical causes of defects in speech, herein contained, is not only extensive but complete.

The effect of ignorance on this subject is often serious and painful. On one occasion a gentleman came to the author with a defect which greatly marred his whole utterance, yet it arose simply from the habit of substituting nasal for oral emission in forming the sibilant consonants—the “fault” described in Section XII, page 49. In this case a surgical operation had been performed, which had subjected the patient to months of suffering, while the defect arose from no organic malformation, but merely from a mechanical habit which might have been checked in childhood, as it was perfectly checked within a week of instruction.

Stammerers have been bewildered more than benefitted by the theories of cause and cure of their impediment, and the extensive terminology given to its many varieties. In nearly all cases, the source of difficulty is a failure in some simple principle of phonation or organic action, to which alone attention requires to be directed. The chief points for the stammerer’s consideration and exercise—whatever peculiarity any case may seem to present—will be found set forth in the preceding pages. Let

these be carefully studied, and the principles perseveringly applied, without thought of "consentaneous nerve actions" or any other recondite theories, and in the vast majority of cases relief will be certainly attained.

The principles of vocal respiration are all-important, not only to stammerers, but to public speakers, readers and singers. Claims have been set up to the recent discovery of the proper function of the diaphragm in breathing; but this "discovery" will be found fully embodied in the Author's *New Elucidation of the Principles of Speech and Elocution*, published in 1849. The simple fundamental principles of breathing cannot be too clearly apprehended. The reader is referred to pages 17-19 for definite instruction on this subject.

Teachers who undertake the rectification of faults of speech should study the mechanism of articulation as exhibited in the symbols of "Visible Speech." The phonetic elements of languages, and their mutual relations, are so depicted in these symbols that all difficulty is removed from this otherwise difficult study. The text book *Sounds and their Relations*, ex-

hibited in Visible Speech,* may be obtained through any bookseller. The *Visible Speech Reader*,† (adapted for children) may also be used with advantage to facilitate the acquisition of English sounds by teacher or pupil.

A. M. B.

WEST WASHINGTON, D. C.,
October, 1885.

* Price \$2.00, post-paid, from the publisher of this Work.

† Recently issued; price 40 cents.

NOTE TO FOURTH EDITION.

No alterations were made in the *Third Edition* of this work, published in 1889; nor are any required in this *Fourth Edition*, issued under the auspices of the Volta Bureau. The little book has done good service during the seventeen years since its first publication; and it is now hopefully committed to a new generation of students.

A. M. B.

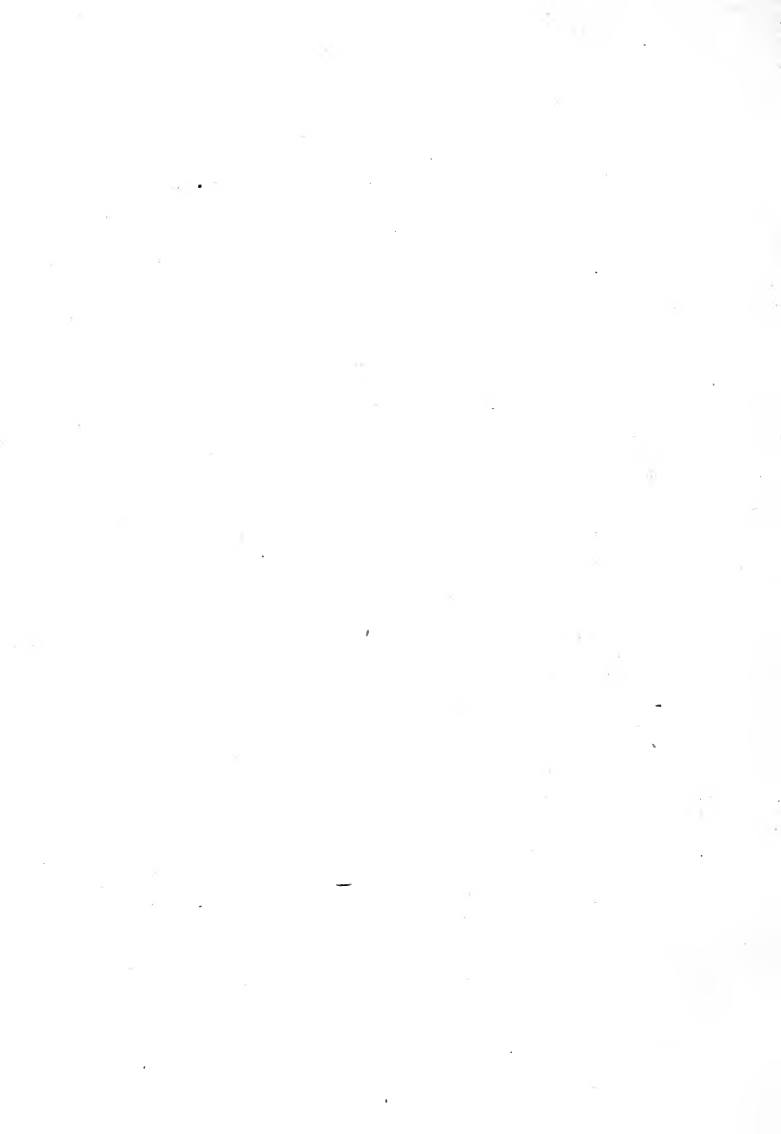
WASHINGTON, D. C.,
1525 35th Street,
Dec. 1st, 1897.

Sounds and Their Relations Exhibited in Visible Speech and *The Visible Speech Reader* are out of print. But the Volta Bureau offers *Visible Speech and Vocal Physiology*, at 50 cents, as one of the most helpful of A. Melville Bell's works. (See page 72.)

APPENDIX

CONTAINING

TABLES AND EXERCISES.





APPENDIX.

Table of Consonants.

THE following table contains all English elements, and others referred to in the preceding pages.

	Oral.	Nasal Emission.	
	non-vocal	vocal	
	non-vocal	vocal	non-vocal vocal
Oral Obstruction	{ P T K	{ B D G	{ (Mh) . . . M Nh N (Ngh). . . Ng
Central Emission	{ (Blowing to cool) Wh S (Rh) { Sh Ch { (Yh) { (Ch) German.	{ W German. W Z R smooth. Zh s in vision. J = dzh. Y Gh { German g in <i>auge</i> ; smooth burr.	
Lateral Emission	{ F Th in <i>thin</i> . Lh Fr. <i>l</i> in <i>table</i> .	{ V Dh <i>th</i> in <i>then</i> . L	
Lax Vibration	{ (Snarl.) (Rh)	{ (Burr.) R trilled.	

Table of Initial Consonant Combinations.

Bl . . . blade	Fr . . . fright
Br bride	Fy few
Bw buoy	Vy view
By beauty	Thr three
Pl place	Thw thwart
Pr price	Thy thews
Py pure	Sl sleep
Dr draw	Sm smile
Dzh jew	Sn snarl
Dw dwell	Sf sphere
Dy due	Sp spy
Tr try	St sty
Tsh chain	Sk sky
Tw twelve	Sw sway
Ty tune	Sy sue
Gl glad	Shr shrink
Gr great	Spl spleen
Gw guelph	Spr spring
Gy gewgaw	Spy spume
Kl climb	Str straw
Kr crime	Sty stew
Kw quite	SkL sclerotic
Ky cure	Skr screw
My muse	Skw squint
Ny new	Sky skewer
Fl flight	

Consonant Exercises.

FOR rapid reiteration.

non-vocal.

pata patapa
 tapa tapata
 paka pakapa
 kapa kapaka
 taka takata
 kata kataka
 pataka pakata
 tapaka takapa
 kapata katapa
 ———
 pafa pafapa
 fapa fapafa
 fawha fawhafa
 whafa whafawha
 pawhafā pafawha
 fapawha fawhapa
 whapafa whafapa
 ———
 fatha fathafa
 thafa thafatha
 thasa thasatha
 satha sathasa
 sasha sashasa

shasa shasasna
 thasha thashatha
 shatha shathasha
 thasasha thashasa
 sathasha sashatha
 shasatha shathasa

vocal.

bada badaba
 daba dabada
 baga bagaba
 gaba gabaga
 daga dagada
 gada gadaga
 bagada badaga
 dabaga dagaba
 gadaba gabada
 ———
 bava bavaba
 vaba vabava
 bawa bawaba
 waba wabawa
 vawa vawava
 wava wavawa
 bawava bavawa

vabawa vawaba
wabava wavaba

vatha vathava
thava thavatha
thaza thazatha
zatha zathaza
vathaza vazatha
thavaza thazava
zavatha zathava

thazha thazhatha
zhatha zhathazha
zazha zazhaza
zhaza zhazazha
thazhaza thazazha
zathazha zazhatha
zhazatha zhathaza

rالا rالارا
lara larala
rana ranara
nara narana
lana lanala
nala nalana
ralana ranala

larana lanara
nalara narala

combinations.

blabra blabrabla
brabra brablabra
plapra plaprapla
prapla praplapra
flafra flafrafla
fracra fracrafla
glagra glagragla
gragla graglagra
clacra clacracla
cracla craclacra
thwaswa thwaswathwa
swathwa swathwaswa
thrashra thrashrathra
shrathra shrathrashra
slasna slasnasla
snasla snaslasna
tradra tradratra
dratra dratradra
chaja chajacha
jacha jachaja
spasfa spafaspa
sfaspa sfaspasfa

staska staskasta	splaspra splaspraspla
skasta skastaska	spraspla sprasplaspra

Words and Sentences.

Beef-broth.	Cloud-capp'd.
Three sixths.	Laurel wreath.
Literally literary.	Linen lining.
Knitting needle.	A comic mimic.
Quit quickly.	Rural railroad.
Such a sash.	Scotch thatch.
Puff up the fop.	Statistics of sects.
A velvet weaver.	Portly poultry.
A cut of pumpkin.	A wet white wafer.
A knapsack strap.	Pick pepper peacock.
Coop up the cook.	I snuff shop snuff.
A school coal-scuttle.	
Veal and white wine vinegar.	
Geese cackle and cattle low.	
Cocks crow and crows caw.	
A shocking sottish set	
She sells sea-shells.	

THE END.

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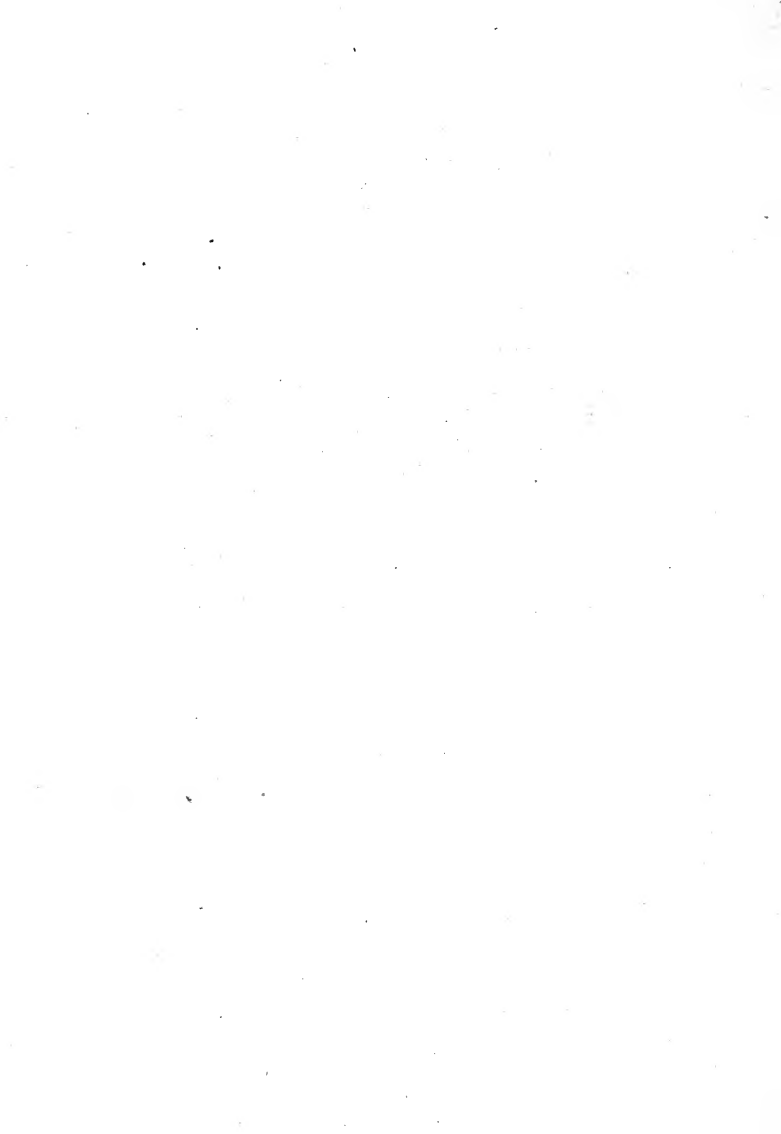
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